

# MK8000 Introduction



MK8000 is a UWB (Ultra-Wideband) technology based highly integrated WSoC (Wireless SoC) compliant to IEEE802.15.4/15.4z, FiRa, CCC3.0 and ICCCE standards with high precision 3-D location capability. It integrates ARM® Cortex M0 processor(up to 62.4MHz) with various memory options and power states optimized for mobile, automotive, IoT, Industrial etc coin cell battery powered applications.

MK800x product family integrates the following features:

- Supports 3.1GHz ~9.0GHz (CH1/2/3/5/6/8/9/10/12) operation
- Supports 110Kbps, 850Kbps, 6.8Mbps and 27.2Mbps data communication.
- Fully integrated TRX switch, antenna switch and matching networks.
- Programmable PA output in 0.5dB step with maximum output up to 10dBm.
- 3cm ranging and 3 degree AoA accuracy
- Less than 120 $\mu$ s wakeup time from deep power down mode (<5 $\mu$ A) to TRX ready with external clock.
- Less than 4 $\mu$ s wakeup time from deep power down mode to MCU ready.
- Fully integrated programmable current limiter.
- System average current is less than 350 $\mu$ A@10Hz in DS-TWR(3-message mode)
- Supports both LGA and WLCSP package

More information, please refer to <https://www.mksemi.com>